

AMENDMENT TO THE SPECIFICATION

The following paragraphs of the specification are amended wherein added text is indicated by underlining, and deleted text is indicated by ~~strike through~~. Changes are identified by a vertical bar in the margin.

Please amend paragraph 43 of the application as follows:

[043] Fig. 12 shows the dispersion diagram for the TM line, which is for wave propagation in the inter-cardinal direction 45° from either principal axis (x and y axis). In this diagram, $q_x = q_y$ and $0 \leq q_x \leq \pi/a$. Below 20 GHz there exists two stop bands, but only the fundamental stop band coincides in both dispersion diagrams. Common to wave propagation in both directions is a stop band extending from 1.505 GHz to 4.036 GHz. So this frequency range can be viewed as the electromagnetic band gap (EBG) for the capacitive-loaded wire media. In one embodiment, a plurality of resonators, or resonant vias, may be disposed in two dimensions with spacing that is less than about one-half of the wavelength of the desired stop band frequency. In the equivalent PPW filter of Figure 9, TEM waves traveling in any lateral (XY) direction will be cut off over this frequency range; i.e., they are evanescent waves.